

**ABSTRACT**

The invention relates to an electronic display that combines the optical function of the display and part of the electronic function of the display into an array of individual fibers. The individual fibers contain a lens or optical function and at least one set of electrodes. Containing the lens function and the address electrode in the same fiber assures alignment of each pixel with its representative lens system and allows for the fabrication of very large three-dimensional, direct view displays. The electronic part of the displays can function as a plasma display (PDP), plasma addressed liquid crystal (PALC) display, field emission display (FED), cathode ray tube (CRT), electroluminescent (EL) display or any similar type of display.